B1 end

periodic dependency over the wavelength, but exhibit a higher resolution than the units employing wavelengths dependent material properties---.

IN THE CLAIMS

Please amend the claims to read as indicated herein. A version of the amended claims with markings to show changes made is included at the end of this document.

Subst C1

1. (Twice amended) A wavelength-determining unit for determining the wavelengths of a plurality of successive optical signals $\lambda(t)$ having a wavelength variation over time, comprising:

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a wavemeter unit adapted for determining first wavelength values $\lambda 1(t)$ having a wavelength variation over time for the optical signals $\lambda(t)$,

an absolute-measuring unit having unambiguous wavelength properties at known absolute wavelength values, and being adapted for determining second wavelength values $\lambda 2(t)$ having a wavelength variation over time as such of the known absolute wavelength values covered by the optical signals $\lambda(t)$, and

an evaluation unit adapted for receiving the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values and for providing corrected wavelength values $\lambda 1'(t)$ having a wavelength variation over time based on a comparison of the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values over time.

Subst C2

7. (Twice amended) A measuring unit for measuring an optical characteristic of a device under test, comprising:

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a wavelength variable laser source adapted for providing an optical signal $\lambda(t)$ to the device under test, the optical signal $\lambda(t)$ having a wavelength variation over the time;

a wavelength-determining unit adapted for receiving the optical signal $\lambda(t)$ and determining wavelength values $\lambda 1(t)$ thereof over the time, said wavelength determining unit comprising a wavemeter unit adapted for determining first wavelength values $\lambda 1(t)$ having a wavelength variation over time for the optical signals $\lambda(t)$, an absolute-measuring unit having unambiguous wavelength properties at known absolute wavelength values, and being adapted for determining second wavelength values $\lambda 2(t)$ having a wavelength variation over time as such of the known absolute wavelength values covered by the optical signals $\lambda(t)$, and a first evaluation unit adapted for receiving the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values having a wavelength variation over time and for providing corrected wavelength values $\lambda 1'(t)$ having a wavelength variation over time based on a comparison of the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values;

a receiver for receiving a signal response on the optical signal $\lambda(t)$ provided to the device under test; and

a second evaluation unit receiving the signal response and the thereto corresponding determined wavelength values $\lambda 1'(t)$ having a wavelength variation over time.

8. (Twice amended) A measuring unit for measuring an optical characteristic of a device under test, comprising:

a wavelength variable laser source adapted for providing an optical signal $\lambda(t)$ to the device under test, the optical signal $\lambda(t)$ having a wavelength variation over the time,

a wavelength-determining unit adapted for receiving the optical signal $\lambda(t)$ and determining relative wavelength values $\lambda 1(t)$ having a wavelength variation over time and absolute wavelength values $\lambda 2(t)$ thereof over the time,

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a receiver for receiving a signal response I(t) on the optical signal $\lambda(t)$ provided to the device under test, and

an evaluation unit receiving the signal response of the receiver and thereto calculating the corresponding wavelength values λ 1'(t) having a wavelength variation over time out of the wavelength values $\lambda 1(t)$ and $\lambda 2(t)$ from the wavelength-determining unit resulting in a spectral response $I(\lambda)$ of the device under test.

9. (Twice amended) A method for determining the wavelengths of a plurality of successive optical signals $\lambda(t)$, comprising:

determining first wavelength values $\lambda 1(t)$ having a wavelength variation over time for the optical signals $\lambda(t)$, using an absolute-measuring unit having unambiguous wavelength properties at known absolute wavelength values for determining second wavelength values $\lambda 2(t)$ having a wavelength variation over time as such known absolute wavelength values covered by the optical signals $\lambda(t)$, and

providing corrected wavelength values $\lambda 1'(t)$ having a wavelength variation over time based on a comparison of the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values.

10. (Twice amended) A software product, stored on a data carrier, for executing a method for determining the wavelengths of a plurality of successive optical signals $\lambda(t)$, when run on a data processing system such as a computer, said method comprising:

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determining first wavelength values $\lambda 1(t)$ having a wavelength variation over time for the optical signals $\lambda(t)$, using an absolute-measuring unit having unambiguous wavelength properties at known absolute wavelength values for determining second wavelength values $\lambda 2(t)$ having a wavelength variation over time as such known absolute wavelength values covered by the optical signals $\lambda(t)$, and

providing corrected wavelength values $\lambda 1'(t)$ having a wavelength variation over time based on a comparison of the determined first $\lambda 1(t)$ and second $\lambda 2(t)$ wavelength values.